



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 39949.3-2021

**Hydraulic fluid power - Mounting dimensions for accessories of
single rod cylinder - Part 3: 16 MPa compact series with bores
from 250 mm to 500 mm**

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Foreword

GB/T 39949 "Installation Dimensions of Hydraulic Transmission Single Rod Cylinder Accessories" is divided into 3 parts.

---Part 1.16MPa medium-sized series and 25MPa series;

---Part 2.16MPa cylinder diameter 25mm~220mm compact series;

---Part 3.16MPa cylinder diameter 250mm~500mm compact series.

This part is Part 3 of GB/T 39949.

This section was drafted in accordance with the rules given in GB/T 1.1-2009.

This part uses the redrafting method to modify and adopt ISO 13726.2008 "Hydraulic Transmission 16MPa (160bar) Compact Series Bore

250mm~500mm Horizontal Bar Cylinder Accessories Installation Dimensions".

Compared with ISO 13726.2008, there are structural differences in this part, and the appendix type of Chapter 5 has been added.

The technical differences between this part and ISO 13726.2008 and the reasons are as follows.

--- Regarding normative reference documents, this section has made adjustments with technical differences to adapt to my country's technical conditions. Adjustment situation

It is concentratedly reflected in Chapter 2 "Normative Reference Documents", and the specific adjustments are as follows.

* Replace ISO 286-2 (see 7.1.1) with GB/T 1800.2 modified to adopt international standards;

* Replace ISO 5598 with GB/T 17446 equivalent to the international standard (see Chapter

3);

* Added reference to GB/T 9094 (see 4.2, Chapter 8);

* Deleted ISO 2944 cited by ISO 13726.2008 (see Chapter 1 and Chapter 2 of ISO 13726.2008);

* Deleted ISO 3320 referenced by ISO 13726.2008 (see Chapter 1 and Chapter 2 of ISO 13726.2008);

* Deleted ISO 6020-3 referenced by ISO 13726.2008 (see Chapter 1 and Chapter 2 of ISO 13726.2008);

* The ISO 8132 referenced by ISO 13726.2008 is deleted (see Chapter 2 and 4.1 of ISO 13726.2008).

This part was proposed by China Machinery Industry Federation.

This part is under the jurisdiction of the National Hydraulic and Pneumatic Standardization Technical Committee (SAC/TC3).

Drafting organizations of this section. Yangzhou Jiangdu Yongjian Co., Ltd., Jiangyin Hongteng Machinery Co., Ltd., Chuzhou Shenyu Hydraulic Technology Co., Ltd.

Company, Bosch Rexroth (Changzhou) Co., Ltd., Shaoguan City, Guangdong Province, Quality and Metrology Supervision and Testing Institute, Zhejiang University, Beijing Machinery Industry Automation Research Institute

Research Institute Co., Ltd.

1 Scope

This part of GB/T 39949 specifies the installation of 16MPa cylinder diameter 250mm~500mm compact series single rod cylinder accessories size.

This section applies to hydraulic cylinders specified in GB/T 38205.3.

Note. The hydraulic cylinder attachment transmits the load mechanically, and its design is based on the maximum load of the hydraulic cylinder, which is in accordance with the requirements of GB/T 2348 and GB/T 2346

The cylinder diameter of the hydraulic cylinder is related to the nominal pressure.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this article

Pieces. For undated reference documents, the latest version (including all amendments) is applicable to this document.

GB/T 1800.2 Product Geometric Technical Specification (GPS) Linear Dimension Tolerance ISO Code System Part 2. Standard Tolerance Zone

Code and limit deviation table of hole and shaft (GB/T 1800.2-2020, ISO 286-2:2010, MOD)

GB/T 9094 fluid transmission system and component cylinder installation size and installation type code (GB/T 9094-2020, ISO 6099.

2018, IDT)

GB/T 17446 Vocabulary of fluid transmission systems and components (GB/T 17446-2012, ISO 5598:2008, IDT)

3 Terms and definitions

The terms and definitions defined in GB/T 17446 apply to this document.

4 Installation dimensions of accessories

4.1 The installation dimensions of the accessories are shown in Figure 1~Figure 5 and Table 1~Table 5.

4.2 The code markings of all installation dimensions shall comply with the requirements of GB/T 9094.

5 Accessory type

This section includes the following types of accessories.

---AP2. Double earrings for piston rod, internal thread (see Figure 1 and Table 1);

---AP4. Single earring for piston rod, internal thread (see Figure 2 and Table 2);

---AA4-L. pin shaft, shaft sleeve, with lock plate (see Figure 3 and Table 3);

---AL6. Lock plate for pin shaft (see Figure 4 and Table 4);

---AA4-S. Pin shaft, shaft sleeve, with split pin hole (see Figure 5 and Table 5).